Reviewer’s report

Title: Patient and Service-Level Factors Affecting Length of Inpatient Stay in an Acute Mental Health Service: A Retrospective Case Cohort Study

Version: 0 Date: 23 Jul 2020

Reviewer's report:

The study aimed to identify factors related to either patients or service providers that may influence length of stay for general adult psychiatric inpatient admissions in a busy urban mental health NHS Trust. This is an important study highlighting the factors effecting the length if inpatients stay. There are several comments that may warrant further consideration:

-It is not clear what mental health issues were investigated in this study.

-When describing the current setting, please clearly outline the location of the mental health trust that is the focus of the analyses. There are many locations in the UK that are marked by their levels of deprivations and ethnic distribution. By not explicitly providing this information implies that all these areas may have the same underlying characteristics and as such the causes of length of inpatient stay, which is not the case.

-It is stated that in the area of study, there is higher than average levels of deprivation and ethnic distribution. What about the prevalence of the mental disorders? were they also higher than an average in the country?

if all mental health conditions, then the length of inpatient stay would vary significantly depending on the mental illness (e.g., anxiety vs psychosis; or depression vs personality disorders). Therefore, it would be helpful to stratify the analyses by the mental illness/sub-groups.

-Minor:

There is no need to include information on SPSS in the abstract as it does not bear any significance for the conducted analyses.
The results in table 3 are not clear. Please present Beta, 95% Confidence Intervals and p-values.

Publons Reviewer Recognition. Springer Nature can send verification of this review directly to Publons (a subsidiary of Clarivate Analytics). If you would like to take advantage of this service, please click on the “Yes” option below. Your name, email address, title of the reviewed manuscript, name of the journal, and date of your review submission (the “Review Data”) will then be transmitted to Publons upon publication of the manuscript. If you have already registered at Publons, they will notify you of the receipt of this review and update your profile as per your settings and their policy. If you are not registered with Publons, you will receive an email from them asking you to register in order for them to be able to recognize your review on your new profile page. Publons may use the Review Data to generate derivative metadata for the benefit of Publons and you as a reviewer, carefully considering the sensitivity of such information. For example, Publons may verify your record as a reviewer by updating your profile published on its webservice if you have registered for such service or help editors to identify candidate reviewers. Please find the details of processing in Publons’ privacy policy https://publons.com/about/terms.
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

Reviewer Publication Consent. I agree for my report to be made available under an Open Access Creative Commons CC-BY License (http://creativecommons.org/licenses/by/4.0) if this manuscript is accepted for publication. Any comments that I do not wish to be included in the published report have been included as confidential comments to the editor, which will not be published. If you are not happy for us to publish this report, please contact the editorial office before completing the review. If you wish, you can include your name in your published report. Please note you must decide whether to include your name at the start of the process and confirm this decision whenever prompted. If you change your decision later, we will not be able to publish your name.

I agree to the terms of the CC-BY 4.0 license; please do not publish my name with my report.

Is the study design appropriate to answer the research question (including the use of appropriate controls), and are the conclusions supported by the evidence presented?

Yes

Are the methods sufficiently described to allow the study to be repeated?
Yes

Is the use of statistics and treatment of uncertainties appropriate?
Yes

Is the presentation of the work clear?
Yes

Are the images in this manuscript (including electrophoretic gels and blots) free from apparent manipulation?
No